## **CLAIMS**

opposing flanges;

 A chemical processing device specifically designed to be inserted along the traverse of a catalytic reactor comprising

an outer tube, two opposing flanges, 1 and 2, with appropriate gasket seals, such flanges being formed steel or other material suitable to contain the reaction environment; two opposing pieces of porous material, 3 and 4, each adjacent to one of the said

a flow distribution matrix, 5, between and adjacent to each said opposing pieces of porous material;

a reactant feed, 8, with attached manifold, 9, connected to said distribution matrix through a series of holes, in the outer tube; and

a catalyst layer formed on the surface of said porous material or on a wire mesh, palletized forms, or other appropriate means